

**Supplementary Table 1:** Clinicopathological characteristics of PDAC patients in cohort (n=25) analyzed by flow cytometry (**Figure 1a**).

Characteristic	n (%)
<b>Gender</b>	
Male	16 (64)
Female	9 (36)
<b>Age</b>	
Median (Range)	65 (50-77)
<b>Tumor Location</b>	
Head	20 (80)
Body/Tail	5 (20)
<b>Procedure</b>	
Distal Pancreatectomy	5 (20)
Pancreaticoduodenectomy	20 (80)
<b>Pathological State</b>	
IA	3 (12)
IB	2 (8)
IIA	4 (16)
IIB	14 (56)
III	2 (8)
IV	0 (0)
<b>pT</b>	
1	3 (12)
2	6 (24)
3	16 (64)
4	0 (0)
<b>pN</b>	
0	9 (36)
1	14 (56)
2	2 (8)
<b>pM</b>	
0	25 (100)
1	0 (0)
<b>Margin</b>	
Positive	5 (20)
Negative	20 (80)
<b>Adjuvant Treatment</b>	
Yes	19 (76)
No	6 (24)
<b>Neoadjuvant Treatment</b>	
Yes	11 (44)
No	14 (56)

**Supplementary Table 2:** Clinicopathological characteristics of PDAC patients in transcriptome cohort (Figure 1c, Extended Data Figure 1b).

Characteristic	Short Term (n=12) n (%)	Long Term (n=13) n (%)	P value
Gender			0.70
Male	6 (50)	5 (38)	
Female	6 (50)	8 (62)	
Age			0.01
Median (Range)	76 (53-83)	58 (45-88)	
Tumor Location			0.65
Head	8 (67)	10 (77)	
Body/Tail	4 (33)	3 (23)	
Procedure			0.57
Distal Pancreatectomy	4 (33)	3 (23)	
Pancreaticoduodenectomy	8 (67)	10 (77)	
Total Pancreatectomy	0 (0)	0 (0)	
Pathological Stage			0.82
I	0 (0)	0 (0)	
II	9 (75)	12 (92)	
III	1 (8)	1 (8)	
IV	2 (17)	0 (0)	
pT			0.72
1	0 (0)	0 (0)	
2	0 (0)	0 (0)	
3	10 (83)	12 (92)	
4	2 (17)	1 (8)	
pN			>0.99
0	5 (42)	6 (46)	
1	7 (58)	7 (54)	
pM			0.22
0	10 (83)	13 (100)	
1	2 (17)	0 (0)	
Margin			0.16
Positive	4 (33)	1 (8)	
Negative	8 (67)	12 (92)	
Adjuvant Treatment			0.91
Yes	9 (75)	10 (77)	
No	3 (25)	3 (23)	
Unknown	0 (0)	0 (0)	

\* P value by two-sided Chi square test.

**Supplementary Table 3:** ILC2 single-cell RNA sequencing cellular and transcriptomic metrics (Figure 4c, Extended Data Figures 7-9, 10g).

<b>Compartment</b>	<b>Treatment</b>	<b>Median # genes</b>	<b>Median # UMIs</b>	<b>Cells post Seurat QC</b>
Tumor	Vehicle	1,840	6,258	28
	rIL33	1,145	3,075	752
	rIL33 + $\alpha$ PD-1	1,618	5,607	2,635
Draining lymph node	rIL33	1,359	3,764	882
	rIL33 + $\alpha$ PD-1	1,143	2,764	2,725

UMI: unique molecular identifier